KUNEL'SKIY, L.

BATKAYEV, R.; KUNEL'SKIY, L.

New wage terms in operation. Sots. trud no.2:149-154 F '58.
                                    (Wages)   (MIRA 11:1)

NOVIKOV, V.; KUNEL'SKIY, L.

Calculating structural changes in wage funds related to the changed remuneration of workers. Sots. trud. no.6:135-144 Je '58.

(MIRA 11:6)

(Wages)

KUNEL'SKIY, L.

New wage systems and problems of wage planning at machinery
manufacturing enterprises. Sots.trud 6 no.3:48-54 Mr '61.
(Machinery industry) (Wage payment systems)   (MIRA 14:3)

KUNEL'SKIY, L.

        Planning worker' wages in industrial enterprises. Sots. trud
7 no.5:47-52 My '62.   (MIRA 15:5)
                (Wage payment systems)

VASIL'YEV, Ye.; KUNEL'SKIY, L.

For careful and economical labor expenditure. Sots. trud
8 no.12:14-21 D '63.   (MIRA 17:2)

KUNENKOV, S.I.

      History of the production of chlorine bleaching compounds. Trudy
      Inst.ist.est.i tekh.30:301-306 '60.   (MIRA 13:8)
              (Bleaching powder)

9,4160 (also 1137, 1395)

20851
S/048/61/025/003/040/047
B104/B203

AUTHOR: Kunenkov, S. I.

TITLE: Effect of high pressures on the formation of crystal
               phosphors and on their properties

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25,
               no. 3, 1961, 419-422

TEXT: This paper was read at the 9th Conference on Luminescence (Crystal
Phosphors) in Kiyev, June 20-25, 1960. After an extensive introduction
on high-pressure physics and its application to technology, the author
refers to papers by German, Swiss, and American researchers studying
phosphors produced under high pressure. It was found that phosphors made
in this way had other properties than those produced under normal pressure.
The author studied ZnS·CdS-Ag phosphors produced in quartz ampules at
$1000^\circ C$ and 60 atm. The mixture consisted of 55 % ZnS · 45 % CdS - 10^{-4} g/g Ag,
and was treated without a fluxing agent at 450, 500, 600, 700, and $800^\circ C$
and a pressure of 60 atm for 30 min. Fig. 1 graphically shows the results.

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S/048/61/025/003/040/047
B104/B203

Effect of high pressures on the...

The after-glow is nearly not influenced by pressure, whereas, under pressure, the maximum luminescence slightly shifts toward shorter waves. With the use of fluxing agents ($MgCl_2$ - 2 %, $NaCl$ - 2 %) for the same phosphor, luminescence already appears on heating to $350^\circ C$ (cf. Fig. 1). The brightness curves of phosphors made with fluxing agents at high pressure and at atmospheric pressure show no maxima; phosphors made under high pressure are a little brighter, but at higher temperatures of heat treatment the difference is negligible. Fig. 2 shows the brightness of phosphors treated at $450^\circ C$ as a function of pressure. It shows a maximum at 400 atm. A phosphor of the same composition was treated at $600^\circ C$. A slight increase in brightness was found up to 300 atm, further pressure increase showed no increase in brightness. The author thanks V. L. Levshin for his interest in the work, and N. V. Mitrofanova for assistance in the experiments. In a subsequent discussion, B. I. Maksakov reports on experiments made on cadmium sulfide at pressures of up to 1500 atm. After prolonged keeping in liquid state, no essential change in the stoichiometric composition of this substance was observed, nor did the crystal structure change. Good crystals were grown with the aid of

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B104/B203

Effect of high pressures on the...

vacuum distillation, and the resulting cadmium sulfide showed good transparency and high specific resistance.   There are 2 figures, 1 table, and 9 references: 2 Soviet-bloc and 2 non-Soviet-bloc.

Legend to Fig. 1:   Dependence of brightness on the temperature of heat treatment of phosphors made at different pressures from the mixture 55 % ZnS·45 % CdS–10^{-4} g/gAg.

Fig. 1
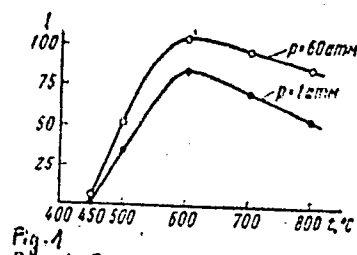
Card 3/4

KUNENKOVA, Ye.N.

Gallium determination in gallium-copper and gallium magnesium alloys.
Trudy Inst.met. no.3:289-291 '58.   (MIRA 12:3)
     (Gallium-copper alloys--Analysis)
     (Gallium-magnesium alloys--Analysis)

KUNENKOVA, Yu.N.

Determination of lanthanum and thallium in La-Tl alloys. Trudy Inst.met.
no.3:292-294 '58.   (MIRA 12:3)
              (Lanthanum-thallium alloys--Analysis)

KUNENKOVA, YE.N

S/137/62/000/003/189/191
A154/A101

AUTHOR: Kunenkova, Ye. N.

TITLE: Determination of chromium in alloys with a high rhenium content

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 13, abstract 3 K 71
            ("Tr. In-ta metallurgii. AN SSSR", 1961, vyp. 8, 234 - 236)

TEXT: A weighed sample of the alloy (0.1 - 0.2 g) containing Cr and Re
is placed into a conical 500-ml retort, 20 ml of 60 % perchloric acid is added,
and the mixture dissolved on a sand bath. The resulting solution is cooled and
diluted with water to 200 ml. If the solution is turned reddish by Mn, it is
heated, 2 ml of a 5 % solution of NaCl is added, the solution is boiled for
3 - 5 minutes until coloration disappears, cooled, a 0.1 n. solution of Mohr's
salt is added, and the excess titrated by a 0.1 n. solution of KMnO$_4$.

                                                    L. Vorob'yeva

[Abstracter's note: Complete translation]

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KUNENKOVA, Ye.N.

Determination of tungsten in palladium-tungsten alloys.   Trudy
Inst. met. no.11:227-228 '62.   (MIRA 16:5)
(Palladium-tungsten alloys—Analysis) (Tungsten—Analysis)

ACCESSION NR: AP4043460   S/0075/64/019/008/0955/0958

AUTHORS: Kunenkova, Ye.N.; Ostroumov, E.A.

TITLE: Separation of indium from iron, aluminum, chromium, manganese, nickel and cobalt by sulfide precipitation

SOURCE: Zhurnal analiticheskoy khimii, v. 19, no. 8, 1964, 955-958

TOPIC TAGS: indium analysis, indium sulfide precipitation, sulfide group separation, iron, aluminum, chromium, manganese, nickel, cobalt

ABSTRACT: The purpose of this work was to select an optimum medium for the deposition of indium sulfide, to maintain a sufficiently low and constant pH, which would in turn permit separation of indium from iron, aluminum, chromium, manganese, nickel and cobalt. It was shown that by means of monochloroacetic acid alone it is possible to obtain solutions of pH = 2.5, which are completely suitable media for the separation of indium sulfide from the above metals. The optimum conditions are as follows: the weakly acid solution of indium is neutralized with Na_2Co_3 solution until the solution becomes cloudy and then one adds 10 ml of 2 N monochloroacetic acid, upon which

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ACCESSION NR: AP4043460

cloudiness disappears and the pH becomes 2.5. From such a solution heated to 80°C indium is precipitated with H_2S. The precipitate is filtered, washed, ignited at 1000°C and after cooling weighed as In_2O_3. Under these conditions the above listed metals cause no interference. Orig. art. has: 2 tables.

ASSOCIATION: Institut metallurgii im. A. A. Baykova (Institute of Metallurgy)

SUBMITTED: 01Aug63   ENCL: 00

SUB CODE:IC,GC   NR REF SOV: 002   OTHER: 004

Card 2/2

L 3441-66   EWT(m)/EPF(n)-2/EWP(t)/EWP(b)   IJP(c)   JD/JG/GS
UR/0000/65/000/000/0312/0314

ACCESSION NR: AT5023105

AUTHOR: Kunenkova, Ye. N.; Postnikova, I. S.

TITLE: Determination of niobium and gallium in niobium-gallium alloys

SOURCE: Problemy bol'shoy metallurgii i fizicheskoy khimii novykh splavov (Problems of large-scale metallurgy and physical chemistry of new alloys); k 100-letiyu so dnya rozhdeniya akademika M. A. Pavlova. Moscow, Izd-vo Nauka, 1965, 312-314

TOPIC TAGS: gallium, niobium, quantitative analysis, chemical precipitation, cupferron, phenylarsonic acid

ABSTRACT: Owing to the extremely similar analytic properties of Nb and Ga, the analysis of these metals is a difficult and complicated task. In this connection, the authors describe the simplified and much faster technique they developed for this purpose, on establishing the feasibility of the direct precipitation of Ga with cupferron in the presence of phenylarsonic acid. Basically, the process then is as follows: subsequent to the decomposition of the Nb-Ga alloy with a 10%

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L 3441-66

ACCESSION NR: AT5023105

H_2SO_4 solution the Nb of the alloy mixture is precipitated as usual with pheny-
larsonic acid, and the Ga remaining in the filtrate is then precipitated with
cupferron in the presence of phenylarsonic acid, since in this case phenylarsonic
acid does not interfere with the precipitation of Ga. This successive precipitation
is followed by quantitative determination of the precipitated Nb and Ga: in both
cases the procedure is fundamentally the same, involving filtration, dilution,
coagulation, drying, and roasting of the precipitates of both metals, followed
by weighing them in the form of Nb_2O_5 and Ga_2O_3, with the conversion factors
amounting to 0.6990 for Nb and 0.7439 for Ga. Orig. art. has: 2 tables.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 001

ENCL: 00

OTHER: 000

SUB CODE: MM, GC

Card 2/2

L 3442-66   EWT(m)/ETC/EPF(n)-2/EWG(m)/EWP(j)/T/EWP(t)/EWP(b)   IJP(c)   JD/JG/GS/RM

ACCESSION NR: AT5023106   UR/0000/65/000/000/0315/0319   50 B+1

AUTHOR: Kunenkova, Ye. N.; Bobrova, T. Kh.

TITLE: Colorimetric determination of tungsten, molybdenum and rhenium in metallic niobium

SOURCE: Problemy bol'shoy metallurgii i fizicheskoy khimii novykh splavov (Problems of large-scale metallurgy and physical chemistry of new alloys); k 100-letiyu so dnya rozhdeniya akademika M. A. Pavlova. Moscow, Izd-vo Nauka, 1965, 315-319

TOPIC TAGS: niobium base alloy, tungsten, molybdenum, rhenium, colorimetric analysis, thiocyanate

ABSTRACT: The authors present the results of an experimental colorimetric determination of W, Mo, and Re in the presence of Nb (in the form of binary alloys with Nb) based on combining of these metals with potassium (or ammonium) thiocyanate to form yellow-colored compounds which then can be colorimetrically determined, on prior complexing of Nb with ammonium oxalate. It is shown that, in agreement with the findings of Alimarin and Podval'naya (ZhAKh, 1, 1, 30, 1946),

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ACCESSION NR: AT5023106   0

the oxalate complex of Nb indeed does not form a yellow-colored compound with the
thiocyanate. At the same time, however -- and this is the principal finding --
it does not interfere with the formation of yellow-colored thiocyanate complexes
of W, Mo, and Re. Thus, even 20 mg of Nb in the colorimetrically determined vo-
lume of the binary alloy, in the presence of 10 cc of 4% solution of ammonium
thiocyanate did not interfere with the colorimetric determination of Mo, W, and
Re. Further, colorimetric determination of W and Mo in ternary Nb-W-Mo alloys
is also feasible. When assaying Mo in Nb, the colorimetrically determined volume
must contain not more than 1 mg W; in this case even as little as 0.01 mg Mo may
be determined. If, however, the Nb alloy contains 0.03-0.05 mg Mo, the presence
of as much as 1.5 mg W does not interfere with the colorimetric determination of
Mo. When assaying W in Nb in the presence of Mo, the colorimetrically determined
volume should not contain more than 5 mg Mo. In this case, solutions with a
greenish-yellow color, characteristic of tungsten, are obtained. When assaying
Re in Nb in the presence of W, even 30 mg of W in the colorimetrically determined
volume will not interfere with the determination. On the other hand, the colori-
metric determination of W in Nb in the presence of Re is not feasible, since
even as little as 0.1 mg Re will produce a more intensive coloring than 0.2 mg W.

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Card

L 3442-66

ACCESSION NR: AT5023106

In such cases Re must be eliminated in advance.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: MM, GC

NO REF SOV: 001   OTHER: 000

Card   3/3

KUNERT, F.

Use of the method of false perturbations in searching for the eigenvalues and eigenvectors of a nonself-adjoint operator. Metod. vych. no.2:10-23 '63.

(MIRA 18:11)

KUNERT, Ferenc

Budapest-Ostrava-Katowice, 1963. Repules 16 no.8:17 Ag '63.

1. Postas Repuloklub vezetoje.

KUNERT, F. (Leningrad)

Iterative methods for finding the eigenvalues of self-adjoint operators. Zhur. vych. mat. i mat.fiz. 4 no.1:143-145 Ja-F '64. (MIRA 17:6)

KUNERT, F.

    Kantorovich – Rubinshtein metrics and the convergence of self-adjoint
operators. Vest. LGU 20 no.13:35-49 '65.   (MIRA 18:7)

KUNERT, J.

Surface distribution of dermatophytes in a natural site.
Cesk. epidem. 14 no.4:209-214 Jl '65.

1. Katedra biologie lekarske fakulty Palackeho University,
Olomouc.

L 20517-66   T   JK
ACC NR: AP5021655   (A)   SOURCE CODE: CZ/0067/65/014/004/0209/0214

AUTHOR: Kunert, J.

ORG: Department of Biology of the Medical Faculty PU (Katedra biologie lekarske/
fakulty PU, Olomouc

TITLE: Surface areal distribution of dermatophytes at the natural site

SOURCE: Ceskoslovenska epidemiologie, mikrobiologie, imunologie, v. 14, no. 4, 1965,
209-214

TOPIC TAGS: dermatology, parasite, microbiology, animal parasite, soil bacteriology,
soil behavior

ABSTRACT: This investigation of the areal distribution, interrelations and varia-
bility of dermatophytes and related keratinophil types at the natural site of occur-
rence was undertaken because up to the present little was known about the dynamics
of occurrence of these organisms in the soil and its relation to the moisture content,
thickness of the soil profile and the presence of antagonists. More research in this
sphere is necessary for a better understanding of the ecology of dermatophytes. In
all, 600 soil samples were collected from 200 points over an area measuring 10 by 100m
in a meadow [grass field] near Olomouc, and they were tested by the "hair bait method"
for the presence of dermatophytes. Of the samples tested, 97.5% yielded positive re-

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L 20517-66

ACC NR: AP5021655

sults. Keratinomyces ajelloi was present in 97% of the samples taken, Trichophyton terrestre in 26.5%, and Arthroderma multifidum was found in abundance (in 24.0% of the samples). Microsporum gypseum was not found at all. Chrysosporium asperatum, not known heretofore in Europe, was found in one soil sample. The areal pattern of prevalence of the fungi studied indicates that the occurrence of T. terrestre and A. multifidum is not uniform, but that they are concentrated in "nest-like" centers. A marked prevalence maxima of these fungi occur in the par's of the field with the better soils and which, apparently, were more frequented by animals. The prevalence of K. ajelloi was mot marked in these rich soil areas though it was in evidence over the entire field investigated. Orig. art. has: 1 figure and 1 table.

SUB CODE: 06   SUBM DATE: none   ORIG REF: 027

Card 2/2

KUNERT, Jozef (Gdynia)

>   The new Polish Maritime Code in the view of overseas practice.
>   Tech gosp morska 12 no.6:168-169 Je '62.

KUNERT, Jozef; HOLOWINSKI, J.

Computation of demurrage. Tech gosp morska 14 no.1:
12-13 Ja'64.

KUNERT, Jozef (Gdynia)

Calculation of the demurrage period of a vessel and the Polish
Maritime Code. Tech gosp mcrska 12 no.9:263 S '62.

KUNERT, Jozef, (Gdynia)

       Provisions on demurrage in the Polish Maritime Code. Tech gosp
       morska 13 no.5:136-139 My '63.

KUNERT, Jozef (Gdynia)

More on the technique of overseas commerce. Tech gosp morska 11 no.10:
306-307 '61.

KUNERT, J.; HEJTMANEK, M.

Isolation of a new dermatophyte of the genus Keratinomyces
vanbreuseghem 1952. Cesk. epidem. 13 no.5:293-297 S '64.

1. Katedra biologie lekarske fakulty Palackeho University,
Olomouc.

KUKERT, K.

Thirty-second International Poznan Fair. Polimery tworz
wielk 8 no.9:351-354 '63.

KUNERT, K.; NIEWIAROWSKI,Z.; PORWISIAK,Z.; WROBEL,K.; BORKOWSKI,J.;
GAJEWSKI,M.

Terminology of screw extruders. Polimery tworz wielk 8 no.12:
456-460 D'63.

1. Instytut Tworzyw Sztucznych, Warszawa.

KUNERT, Krzysztof

Shaping methods of solid or thick-walled construction parts made of plastics. Polimery tworz wielk 8 no.5:176-181 My '63.

1. Dzial Przetworstwa, Instytut Tworzyw Sztucznych, Warszawa.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products. H
     Fats and Oils. Beeswaxes. Soaps. Detergents.
     Surface-Active Agents.

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 68837.

Author : Celinovsky J., Kunertova F.
Inst   : Not given.
Title   : Catalytic Isomerization of Vegetable Oils.

Orig Pub: Chem. promysl, 1957, 7, No 7, 381-385.

Abstract: Conditions under which catalytic isomerization of
     cottonseed oil and formation of methyl esters of
     acids takes place, that lead to the reduction of
     acids, having conjugated double bonds, have been
     investigated. A nickel type catalyst was employed.
     It was prepared by precipitation from nickel sul-
     fate with caustic followed by reduction of the
     dried precipitate with hydrogen. Thus prepared

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CZECHOSLOVAKIA / Chemical Technology. Chemical Products. H
    Fats and Oils. Beeswaxes. Soaps. Detergents.
    Surface-Active Agents.

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 68837.

Abstract: catalyst contained 35% Ni and 5% S. The isomeri-
    zation reaction was conducted in N$_2$ atmosphere
    while reactants were agitated continuously at 130-
    260° for 5-120 minutes. The catalyst dosage em-
    ployed was 1-4% (expressed at wt% of nickel basis
    fresh oil). The optimum operating conditions were
    established. They were: 2% catalyst dosage, 180°,
    and 1 hour reaction time. Under these conditions
    40% of isomers with conjugated double bonds were
    formed. It was found that catalyst activity pro-
    gressively declines and is a function of time in
    use.

Card 2/2

KUNES, J.

"Principles of nuclear engineering" by I.I. Novikov,
K.D. Voskresenskij [Vokresenskiy, K. D.]. Vol. 1: "Applied
thermodynamics and heat transmission." Reviewed by J. Kunes.
Jaderna energie 9 no.5:180 My '63.

CZECHOSLOVAKIA/Physical Chemistry. Electrochemistry.   B

Abs Jour: Ref Zhur-Khim., No 5, 1959, 14770.

Author : Kunes J., Ctvrtnik V.
Inst   :———————
Title   : Basic Principles for the Measurement of Potential
          Gradients in an Electrolytic Bath.

Orig Pub: Strojirenstvi, 1958, 8, No 6, 459-463.

Abstract: A method for the measurement of a potential gradient
          by double probe is described. Instruments, permitting
          the carrying out of the measurements, correct to $\pm$ 0.5 -
          1%, are described. -- Authors' resume.

Card   : 1/1

KUMES, J.; CTVRTNIK, V.

Use of electric models in research of flow in bladed wheels, p. 519

STROJIRENSTVI (Ministerstvo teskeho strojirenstvi, Ministerstvo vseobecneho stronirenstvi) Praha, Czechoslovakia, Vol. 9, no. 8, Aug. 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 9, no. 2, Feb. 1960

Incl.

Z/032/60/000/02/002/023
E073/E535

AUTHORS: Kuneš, J., Engineer and Čtvrtník, V., Engineer

TITLE: Determination of the Temperatures in the Rotor and Vanes
             of Gas Turbines by Means of Electrical Analogues

PERIODICAL: Strojírenství, 1960, Nr 2, pp 83-88

ABSTRACT: The only paper known to the authors concerning application
             of the electrothermal analogy for studying the temperature
             fields in cooled gas-turbine blades deals with the analogy
             study of the temperature distribution in cooled gas-turbine
             blades (G.F.Kettleborough, Brit. Journ. Appl. Phys., 1955,
             Nr 6). His paper is too brief and too general.
             Litvinov (Ref 7) deals with determination of the steady-
             state temperature fields in cooled turbine blades and
             discs by the electrical-analogy method; Shvets,
             Gerashchenko and Dyban (Ref 10) published results of
             investigations of the temperature fields at the roots of
             gas-turbine blades. In Czechoslovakia the electrothermal-
             analogy method was little used until very recently; a
             problem which has been solved (Ref 4) is that of the
Card 1/4   combined solution of the temperature fields

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E073/E335

Determination of the Temperatures in the Rotor and Vanes of
Gas Turbines by means of Electrical Analogues

in the rotor and in the blades of gas turbines. In this
paper the process of producing an analogue is dealt with
in great detail and/simulation of the boundary conditions
of the rotor and the blades is solved. A further
C z e c h   paper (Ref 5) deals with investigation of
the temperature fields in internally-cooled gas-turbine
blades. A method is described of measuring the temperatures
in the rotor, blade and blade root of a gas turbine by
electrothermal analysis and the procedure to be applied
in simulating by means of an electrolytic model is
elucidated. The accuracy of measurement is verified by
comparing the measured and the calculated values for
discs of constant and of hyperbolic cross-section,
assuming equal boundary conditions; the inaccuracy was
found to be less than 0.5%. In Figure 1 a diagrammatic
sketch is given of a cooled rotor of a turbine. In
Figure 2 a blade lattice is diagrammatically represented.
Figure 3 shows the connection of electrodes for an
Figure 4 shows the connection
Card 2/4 analogue of the blades.

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Determination of the Temperatures in the Rotor and Vanes of
Gas Turbines by means of Electrical Analogues

of the electrodes for an analogue of the blade roots.
The principles of producing analogues, selection of optimum
electrodes and an electrolyte were dealt with in an
earlier paper by the authors (Ref 1). In this paper, the
actual process of carrying out the analogue tests is
described, whereby a sketch, Figure 5, shows the procedure
to be applied in working with the analogue. Figure 6
shows a photo of an electrical analogue of a blade.
Figure 7 shows a photo of the analogue of the blade root
and Figure 8 shows the photo of an analogue of the rotor.
An example is described in which the temperature field
was determined for a single-stage gas turbine which was
cooled by air flowing along the faces of the runner wheel.
In Figure 9 the temperature distribution in the blade is
graphed on the assumption that the temperature of the
cooling air is constant and has the values of 140 and
Card 3/4   180 °C, respectively. Figure 10 shows the temperature

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E073/E335

Determination of the Temperatures in the Rotor and Vanes of
Gas Turbines by means of Electrical Analogues

drop in the root of the blade. Figure 11 shows the
temperature field in the runner wheel. Figure 12
shows the resultant temperature characteristic in the
rotor. It is concluded that this method is suitable
and convenient for solving a number of problems
relating to the construction of gas turbines and other
power-generating equipment.
There are 12 figures and 26 references, of which 5 are
Czech, 5 English, 7 German and 9 Soviet.

ASSOCIATION: VŠSE, Pilsen

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26.2124

21102
Z/041/61/000/002/001/001
E073/E335

AUTHORS: Kuneš, J. and Čtvrtník, V., Engineers

TITLE: An Analogue Study of Cooling Turbine Blades

PERIODICAL: Strojnícky Časopis, 1961, No. 2, pp. 79 - 98

TEXT: H.H. Ellerbrock et al (Ref. 10: NACA, T.N. 3060, 1953)
report on the use of electric analogues for calculating the
temperature distribution of cooled turbine blades. In this
paper the authors report the application of an electrical
analogue for determining the stationary temperature fields and
the thermo-elastic stresses in the transverse section of cooled
turbine blades. In the first section of the paper the cooling
methods (gas, liquid) are briefly reviewed, quoting data from
the literature. Following that, a brief mathematical analysis
is given of the heat transfer from the working gas into the
blade, from the blade into the coolant and of the temperature
field and the blade stresses. The method of electrical analogy
is based on applying the results derived by Livingood and
Brown (Ref. 25: NACA Rep. 994, 1950; Ref. 26: NACA Rep. 1066,
1950) and giving an approximate analytical solution using the
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An Analogue Study ....

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Z/041/61/000/002/001/001
E073/E335

method of stress relaxation. The analogy between the Laplace equation

$$\nabla^2 T = \frac{\partial^2 T}{\partial x^2} + \frac{\partial^2 T}{\partial y^2} = 0 \tag{10}$$

and the distribution of electrical potentials on a model produced from a conductor of the same shape as a blade with similar boundary conditions, expressed by:

$$\nabla^2 V = \frac{\partial^2 V}{\partial x^2} + \frac{\partial^2 V}{\partial y^2} = 0 \tag{18}$$

is utilised for simulating the cooling conditions on the turbine blade. A detailed description of the applied technique is contained in earlier work of the authors (Ref. 18: Strojírenství, Vol.10, No.1, 1960; Ref. 33 - Výzkumná zpráva VŠSE, Pilsen, TM 6, 1960). Fig. 4 shows the analogue of a turbine blade with five cooling channels.

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An Analogue Study ....

The experiments were made for working-gas temperatures of
1 000 ^{o}C. Fig. 8 shows the temperature field of several
blades under investigation, for a ratio of the external heat-
transfer coefficient of the turbulent and laminar boundary
layers on the profile $\alpha_{turb}/\alpha_{lam}$ = 1000/500 kcal/m^{2}h ^{o}C and
a coefficient of thermal expansion of the blade material
λ = 20 kcal/m hrs ^{o}C. Fig. 8a applies to a hollow, air-cooled
blade with a blade-to-coolant heat-transfer coefficient
α_{ch} = 200 kcal/m^2 hrs ^{o}C. Fig. 8b applies to a blade with
21 cooling channels arranged at the periphery,
α_{ch} = 2 500 kcal/m^2 hrs ^{o}C. Fig. 8c applies to a blade with
5 cooling channels, a_{ch} = 2 500 kcal/m^2 hrs ^{o}C. Fig. 8d
applies to a blade with 2 cooling channels a_{ch} = 5 000
kcal/m^2 hrs ^{o}C . In addition, plots are included, giving the
temperature curves for 3 blades with various arrangements of
the coolant channels (Fig. 9). Furthermore, plots are

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Z/041/61/000/002/001/001

An Analogue Study ....
E073/E335

included of the effect of the external heat-transfer
coefficient on the blade temperature curve; the effect of
the internal heat-transfer coefficient on the blade temperature
conditions; the effect of the thermal conductivity of the
blade material on the blade temperature conditions. The
method proved very useful; it enabled more accurate studies
within a short time, even if the problems were three-
dimensional with arbitrarily complex boundary conditions.
In the given case, electrical analogy enables solution of the
biharmonic equation expressing the thermo-elastic stress
distribution in the blade. The here described method can
also be used for solving problems of unsteady temperature
fields in turbine blades by means of resistance networks.
(Abstracter's note: an English-language article on the
subject with the title "An Analogue Study of Turbine-blade
Cooling" has been published in "Technical Digest", 1960, No. 11,
pp. 4 - 11.) There are 12 figures, 1 table and 35 references:

Card 4/7

21101
Z/041/61/000/002/001/0C1
E073/E335

An Analogue Study ....

4 Czech and 31 non-Czech. The four latest English-language
references are: Ref. 11 - Esgar, J.B. Turbine Cooling.
Trans. ASME-Journal. Engng. for Power, July, 1959;
Ref. 14 - Grootenhuis, P. The mechanism and application of
effusion cooling. Journ. R.A.S. Vol.63, No.578, Feb. 1959;
Ref. 15 - Hodge, R.I., Johnson, J.H. A review of blade-
cooling systems. The oil engine and gas turbine, Nos. 1-3,
1958; Ref. 22 - Lang, R., Petrick, E.N. Application of
electrical analogue theory in the prelimination design of
air-cooled turbines. ASME gas turbine power conference, 1959.
ref. No. 59-GTP-15.

ASSOCIATION: Vysoká škola strojní a elektrotechnická v
                Plzni (School for Mechanical and Electrical
                Engineering, Pilsen)

SUBMITTED: March 5, 1960

Card 5/7

KUNES, J., inz.

Watchmaking industry in the Soviet Union. Jemna mech opt
6 no.10:322 O '61.

89742
Z/032/61/011/001/002/008
E197/E335

26.2124

AUTHOR: Kuneš, J., Engineer

TITLE: Calculation of Temperatures in Cooled Turbine Blades
by Electric Analogues

PERIODICAL: Strojírenství, 1961, Vol. 11, No. 1,
pp. 13 - 19

TEXT: The study was induced by the necessity of increasing
operating temperatures of gas turbines. A better knowledge of
cooling effects and of the temperature distribution in the
blade is desirable and will give a measure of the thermal
stress prevailing in the blade. The author has used three
different techniques to stimulate temperature distribution by
appropriate electric fields, i.e. voltage distribution, by
using (a) electrolytes, (b) metal foils or graphite coated
papers and (c) resistance networks.
Heat transfer from gas to blade and blade to coolant is
controlled by difficult boundary conditions and the electrical
analogue must simulate both continuous and sudden changes in
boundary conditions due to continuous or sudden changes in the
Card 1/4

89742
Z/032/61/011/001/002/008
E197/E335

Calculation of Temperatures .....

geometry of the blade and of aerodynamic behaviour along the
profile. In the electrolytic method the blade and the cooling
channels are formed by thin plastic strip, 25 mm wide, 1 mm
thick, in which electrical connections are embedded at a pitch
of twice the width of the electrode, the material of the blade
being represented by the electrolyte, normally a weak solution
of $CuSO_4$ in water. Boundary conditions, input and output χ

temperatures are represented by external resistances and the
variation of voltage measured between embedded points and a
movable point submerged in the electrolyte will give the curve
of the corresponding temperature distribution. Curves of
constant temperature are obtained by finding the curves of
constant voltage. The value of thermal conductivity is simulated
by the value of electrical conduction and the uniformity of
conduction in an electrolyte enables accurate results to be
obtained. Where less accurate information is satisfactory,
the electrolyte can be replaced by a conductive film
Card 2/4

89742
Z/032/61/011/001/002/008
E197/E335

Calculation of Temperatures .....

(uniformity of resistance about 10%) and lines of constant
temperature can be plotted by using a pencil as the tracing
electrode. A 5-10 V battery was found suitable. A further
method tried was the use of a uniform network of resistances.
Differential equations are now replaced by difference
equations. Individual resistances with an accuracy of 1% were
used and the potentials were measured at the joint of four
resistances forming the network. While less accurate than the
electrolytic method, the network is more convenient. The
author gives a table of the advantages and drawbacks of the
three methods. An example of the results obtained for a
turbine blade with two cooling channels is given in Fig. 10.
Future work will be aimed at the direct determination of
thermal stress by similar analogue methods. There are
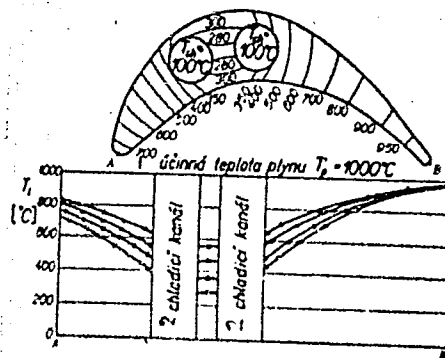13 figures, 1 table and 19 references: 6 Czech and 13 non-
Czech.

ASSOCIATION: VSSE, Pilsen
Card 3/4

89742
Z/032/61/011/001/002/008
E197/E335

Calculation of Temperatures .....

<u>Fig. 10</u>:

1 -   Effective Gas Temperature
        $T_p = 1\ 000\ ^\circ C$

2 -   Cooling channel
3 -   Temperature of Cooling
        medium $T_{ch} = 100\ ^\circ C$

4 -   Blade Temperature (ordinate)
        $T_\ell,\ ^\circ C$

10. Průběh teplot v turbinové lopatce se dvěma chladicími kanály

Card 4/4

BRENIK, Premysl, prof., dr., inz.; KROUPA, J., doc., inz.; HALA, F.; BUDIN, M.,
inz.; JERIE, J., inz., dr.; BELIK, inz., C.Sc.; KACER, inz.; BUKOVSKY, J.,
prof.; KUNES, J., inz.; MARCELLI, V., dr., inz.; VILD, B.; EMINGER, Z.,
Dr.Sc.; SKARECKY, inz.; DRAHY, J., inz.; MASEK, J., inz.; DOLEZAL, inz.;
URBANEK, J., inz., C.Sc.; JUZA, dr., inz.; BECVAR, Josef, prof., inz.;
KRAL, V., inz.; BALOS, inz.; KELLAR, J.; POSPISIL, J., inz.

A conference on heavy-duty steam and gas turbines in Plzen. Energetika
Cz 11 no.5:259-262 My '61.

1. Vysoka skola strojni a elektrotechnicka, Plzen (for Brenik, Bukovsky
and Becvar). 2. Ministerstvo tezkeho strojirenstvi (for Kroupa).
3. Ceskoslovenska akademie ved (for Pospisil). 4. Leninovy zavody,
Plzen (for Hala, Marcelli, Belik, Vild, Eminger, Drahy, Masek, Urbanek,
Juza, Kral and Dolezal). 5. Prvni brnenska strojirna, Zavody Klementa
Gottwalda (for Budin and Balos). 6. Statni vyzkumny
ustav tepelne technicky (for Jerie, Kacer and Skarecky). 7. Clen
korespondent Ceskoslovenske akademie ved (for Jerie and Juza).

KUNES, J., inz.

Use of electronic computers for calculating proper frequencies
of turbine wheels. Automatizace 5 no.2:55 F '62.

KUNES

Constantan tensometers for higher temperature.
Automatizace 5 no.6:178. Je '62.

43192
Z/032/62/012/011/001/001
E160/E435

AUTHORS: Kuneš, J., Engineer, Vavroch, O., Engineer

TITLE: Application of an analog method for determining the
             effect of heat conductivity of the material upon
             temperature and its distribution in a turbine blade

PERIODICAL: Strojírenství, v.12, no.11, 1962, 842-846

TEXT: The authors deal with the effect of varying heat
conductivity of material which is often neglected in the thermal
studies of engines, where its effect is considered negligible and
its absence leads to simplification.   Mathematical solution of
many thermal problems is very complicated and, apart from a few
exceptional cases, they are solved by approximate numerical or
analog methods.   The aim of this paper is to show, using a cooled
turbine blade as an example, the influence of various values, as
well as of continuously varying values, of material heat
conductivity on the temperature distribution over the cross-section
of such a blade.   The blade chosen has a very simple cooling
arrangement - two circular passages - and is subjected to very
unfavourable thermal conditions, an extreme case, eminently
suitable to highlight the method.   The study is limited to a
Card 1/3

Application of an analog ...

Z/032/62/012/011/001/001
E160/E435

two-dimensional stabilized heat flow. Theoretical treatment of such a case, taking varying material heat conductivity with temperature into account, involves second degree, nonlinear differential equations. Their mathematical solution presents considerable difficulty. The suggested method, based on successive analog approximations, is simple and can also be used for other problems which are described by a similar system of equations. The basis of the method is an electrolytic bath. It has advantages over other electrical analogs normally used for the solution of thermal problems which cater only for linear relationship between the heat conductivity and the temperature of the material. In the method of successive approximations the character of this relationship is immaterial. The heat conductivity is represented by the depth of the electrolyte. The method shows a very high convergence and two or three successive approximations are quite adequate; it is sufficiently accurate and requires no further arithmetical computations. Amongst materials studied in this paper were Nimonic 80 and 90 and austenitic steel. Results: the coefficient of heat
Card 2/3

Application of an analog ...   Z/032/62/012/011/001/001
                                             E160/E435

conductivity has a considerable influence on the temperature
inside the blade and thereby on the temperature gradient, which is
very important as regards thermal stressing of the blade.   It is
therefore necessary to take the coefficient of heat conductivity
into account when designing thermally stressed machine parts and
to endeavour to increase its value.   There are 9 figures.

ASSOCIATION: VŠSE, Pizeň

Card 3/3

KUNES, J., inz.

Advantage of the temperature measurement by semiconductor thermometers
and its limits. Automatizaqe 6 no.1:23 Ja '63.

KUNES, Josef, inz.

Use of digital computers for calculating the power characteristics
of condensing electric power plants.   Automatizace 6 no.3:78 Mr '63.

KUNES, J., inz.

"Technical gas dynamics" by M.E.Dejc [Deych, M.E.]. Reviewed by
J.Kunes. Strojirenstvi 13 no.6:477-478 Je '63.

KUNES, Josof, inz.

"Dynamic properties of circuits with thermistors" by A.G.Saskov
[Shashkov, A.G.], A.S.Kasperovic [Kasperovich, A.S.]. Reviewed by
Josef Kunes. Automatizace 6 no.11:Suppl.:Technicka literatura:in-
sert N '63.

KUNES, Josef, inz.

"Mathematical modeling and electric circuits." Reviewed
by Josef Kunes. Automatizace 7 no. 4: Supplement:
Technicka literatura   insert Ap '64.

KUNES, J., inz.

Turbine thermal calculations on the Ural digital computer.
Automatizace 7 no. 6:165 Je '64.

KUNES, Josef, inz. CSc.

"Vibrometry" by J.I.Joris [Iorish, Yu.I.]. Reviewed by Josef Kunes.
Automatizace 8 no.2:Suppl:Technicka literatura:insert F '65.

ACC NR: AP7006016   SOURCE CODE: CZ/0041/66/000/005/0492/0506

AUTHOR: Kunes, Josef -- Kunesh, I. (Engineer; Candidate of sciences);
Ulrych, Bohus -- Ulrikh, B. (Engineer); Franta, Vaclav (Engineer)

ORG: High School of Machinery and Electrical Engineering, Pilsen (Vysoka skola
strojni a elektrotechnicka)

TITLE: The solution of thermal shocks on paper R-C analogons [Presented by:
Engineer and Candidate of Sciences Ludek Krejci]

SOURCE: Strojnicky casopis, no. 5, 1966, 492-506

TOPIC TAGS: thermal shock, temperature gradient, turbine blade, reactor
pressure vessel, model, RC model

ABSTRACT: A solution is made of the problem of determining non-stationary
temperatures and temperature gradients, which arise in parts of energetic
machines at thermal shocks. For the solution, R-C models are used. The basic
theory of the electrothermal analogy of unsteady fields is given and three typical
examples of thermal shock are solved, i. e., in a plate, in a turbine blade, and in a
reactor pressure vessel. Orig. art. has: 9 figures and 23 formulas. [Authors'
abstract] SUB CODE: 20, 10, 18/SUBM DATE: 24Aug65/ORIG REF: 003/   [KS]
Card 1/1   OTH REF: 007/

KUNES, Karel, inz.

New views on changes in kaolinite, feldspar, and quartz during heating. Sklar a keramik 14 no. 3: 69-70 Mr '64.

1. Higher School of Chemical Technology, Department of Silicate Technology, Prague.

MUSIL, Frantisek; POKORNY, Milos. Technicka spoluprace: KUNESOVA, Marie

· perience with heparin Spofa linguets in atherosclerosis.
Vnitrni lek. 11 no.12:1198-1202 D ' 65.

1. Ustredni biochemicka laborator ZUNZ LZ Pizen (prednosta -
MUDr. Frantisek Musil) i Vnitrni oddeleni ZUNZ LZ Plzen (pred-
nosta - doc. MUDr. Milos Pokorny, CSc,)

CHERNENKO, ... , Insh.; DURENATS, V.A., Insh.; KANETS, I.S., Insh.; ..., U.G., Insh.; POLINSKIY, B.A., insh.

Making a drift with the use of a mine corveyer. Shakht. stroi.
9 no.6:4-25 Je '65.   (MIRA 18:7)

1. Komtik Imeni Kosiutona, Krivorozhskiy bassoyn (for Chernenko,
Durenats, Iyach). 2. Nauchno-issledovatel'skiy gornorudnyy insti-
tut, Krivoy Rog (for Kanets, Polinskiy).

KUNETS, G.O., inzh.; DOLINSKIY, N.A., inzh.; STOYANOV, A.T., inzh.

Rapid crosscutting with the use of the PML-9 loading machine.
Shakht. stroi. 8 no.5:21-22 My'64   (MIRA 17:7)

1. Nauchno-issledovatel'skiy gornorudnyy institut (for Kunets,
Dolinskiy). 2. Rudnik imeni Kominterna tresta Leninruda (for
Stoyanov).

KAMENEV, N.I., gornyy inzh.; KUPRIK, N.F., gornyy inzh.; KUNETS, G.O.

High-speed drifting at the Liebknecht Mine. Gor.zhur. no.3:33-35
Mr '60.   (MIRA 14:5)

1. Rudnik im. K.Libknekhta (for Kuprik). 2. Nauchno-issledovatel'-
skiy gornorudnyy institut (for Kunets).
            (Tunneling)   (Boring)   (Blasting)

ACC NR: AP6034010   (N)   SOURCE CODE: UR/0213/66/006/005/0877/0881

AUTHOR: Burnashov, V. Kh.; Dzhus, V. Ya.; Kunets, T. A.; Labeysh, V. G.; Mayyer, A. V.; Merlin, V. M.

ORG: none

TITLE: Visual observations of the thermocline in the sea

SOURCE: Okeanologiya, v. 6, no. 5, 1966, 877-881

TOPIC TAGS: thermocline, Ocean current ~~undersea photography~~, underwater photography

ABSTRACT: The article analyzes the possibility of studying the nature of the thermocline using direct observations and with the aid of under-sea photography. The flow is fixed by the path of dye-stuff which is formed by a releasing a weight colored with fluoreocein. This method, successfully applied during a number of cruises in 1964—1965, helped the authors discover the effect of "wedging out of the rate of flow in the thermocline," i.e., the change in the position of the dye-stuff in the flow has shown that the rate of flow decreased near the thermocline, reaching a minimum in the thermocline, and then gradually increased below the thermocline,. Flow directions above and below the thermocline coincide (visual observations show a discrepancy of not more than 20°). The dyeing of waters in the flow and photographic observations of its

Card 1/2

ACC NR: AP6034010

change in space present a more accurate picture of the distribution of the rate of flow compared to other methods. Such accuracy is especially necessary in studies of hydrophysical processes taking place in the thermocline and at its boundary. Orig. art. has: 3 figures.

SUB CODE: 08,14/ SUBM DATE: 23Apr66/ OTH REF: 001

Card 2/2

KUNETSKAYA, L.

Great leader and the Kremlin guard cadets; on the 90th
anniversary of V.I.Lenin's birth. Voen.znan. 36 no.2:3-4
F '60.   (MIRA 13:1)
       (Lenin, Vladimir Il'ich, 1870-1924)

SUBBOTINA, Z.; KUNETSKAYA, L., kand.istor.nauk

Visiting V.I.Lenin's office in the Kremlin. Voen.znan. 36
no.4:9-11 - Ap '60.   (MIRA 13:4)
(Lenin, Vladimir Il'ich, 1870-1924--Museums, relics, etc.)

TSUPOR, Sergey Fedorovich; KUNETSKIY, V., red.; SHLYK, M., tekhn.
red.

[Matriculation test]Ekzamen na zrelost'. Moskva, Mosk.
rabochii, 1961. 38 p.   (MIRA 15:8)
(State farms)

VAL'DGARD, Sergey Leonidovich, lektor i metodist; KOZINA, L.,
     red.; KUNETSKIY, V., red.; POKHLEBKINA, M., tekhn. red.

[How to deliver popular lecture on natural science] Kak
chitat' nauchno-populiarnye lektsii po estestvoznaniiu.
Moskva, Mosk. rabochii, 1963. 159 p.   (MIRA 16:12)
     (Science—Addresses, essays, lectures)

KUDENKO, Oleg Ivanovich; KUNETSKIY, V., red.

[Orbit of life] Orbit zhizni. Moskva, Mosk. rabochii,
1965. 295 p.   (MIRA 18:2)

BULGARIA

Col. G. Gorchev, Candidate of Medical Sciences Iv. POPCHEV, Major K.
POPOV and Lt. Col. N. NEMCHEV

"Treatment of Clavicular Fractures."

Sofia, Voenno Meditsinsko Delo, Vol 18, No 1, Feb 1963; pp 13-19.

Abstract [Russian Summary modified:] Of 562 patients with clavicular
fracture treated in the traumatologic clinic of the Military Medical
Academy 1953-1962, only 41 ('26.38") were treated surgically, rest
con servatively. Of surgical methods, intramedullary osteosynthesis
is generally considered best. "Curelage" [wire bracing?] is definitely
pernicious despite its wide use at present in Bulgaria. Much clinical
and statistical detail, authoritative polemical attitude. Six
roentgenograms, 4 tables; no references.

1/1

13

KUNEV, A.

Interpretation of the origin and transformation of so-called supplementary head of the abductor digiti quinti. Nauch. tr. Med. akad. Chervenkov, Sofia 1 no.1:55-68 1953.

1. Predstavena ot prof. D.Kadanov, zavezhdashch Katedrata po anatomiia na choveka.
(HAND, muscles,
abductor digitis quinti, origin & transform. of supplementary head)

KUNEV,)

IKONOMOV, Il, KUNEV, A.

New surgical a pproach to the foot; preliminary communication.
Khirurgiia, Sofia 8 no.8:683-689 1955.

1. Vissh meditsinski institut V.Chervenkov - Sofiia. Klinika po
ortopediia i travmatologiia. Direktor: prof. B.Blichev. Katedra
po anatomiia na choveka. Zavezhdashch: prof. D.Kadanov.
        (FOOT, surgery,
            approach)

KUNEV, A.

"Types of the Superficial Palm Arch of the Hand (Arcus Volaris Superficialis) and Their Development in Man."

p. 221 (Izvestiia, Vol. 2, 1957, Sofiia, Bulgaria)

Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 11, Nov. 1958

KUNEV, A.

Morphological studies on tendons and sheets of the musculus extensor digitorum connexus intertendineus (Musculus extensor digitorum communis). Khirurgiia, Sofia 11 no.8:746-755 1958.

1. Zav. katedrata: Chlen-korespondent na Ban D. Kadanov.
        (FINGERS, muscles & tendons
             musc. extensor digitorum communis (Bul))

KUNEV, Ar. (Sofiia)

Evolution of M. abductor pollicis longys and M. extensor pollicis brevis in man. Izv.Inst.morf.BAN 3:196 '59.   (EEAI 9:5)

1. Starshi asistent, Katedra po anatomiia na choveka pri Visshiia meditsinski institut, Sofiia.
                              (MUSCLES)

L 46889-66   EWT(m)/EWP(t)/ETI   IJP(c)   JD
ACC NR: AP6027194   (A, N)   SOURCE CODE: UR/0078/66/011/008/1989/1991

AUTHOR: Kunev, D. K.; Belyayevskaya, L. V.; Zelikman, A. N.

ORG: none

TITLE: The systems MoO_3-$CaMoO_4$, MoO_3-$PbMoO_4$ and MoO_3-$ZnMoO_4$

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 8, 1966, 1989-1991

TOPIC TAGS: molybdate, calcium compound, lead compound, zinc compound, phase diagram, x ray diffraction analysis

ABSTRACT: Thermographic and microscopic analyses were used to investigate the systems MoO_3-$CaMoO_4$, MoO_3-$PbMoO_4$ and MoO_3-$ZnMoO_4$. X-ray diffraction was also used to study the MoO_3-$CaMoO_4$ system. The heating and cooling curves were taken with a Kurnakov pyrometer with differential recording. The MoO_3-$CaMoO_4$ system has one eutectic at 25 wt. % $CaMoO_4$ melting at 727±3 °C. The MoO_3-$PbMoO_4$ system has one eutectic at 49 wt. % $PbMoO_4$ melting at 670 °C. $PbMoO_4$ melts without decomposing at 1063 °C. The MoO_3-$ZnMoO_4$ system has one eutectic at 42 wt. % $ZnMoO_4$ melting at 705 °C. $ZnMoO_4$ melts with decomposition via a peritectic reaction at 1000 °C. No acid molybdates were found in the systems studied. Some data on MoO_3-$MeMoO_4$ systems (where Me = Cu, Fe, Pb, Zn, Ca) are presented. All these systems are of eutectic type. Lead, iron and calcium molybdates melt without decomposing, whereas zinc and copper molybdates melt with decomposition via a peritectic reaction and have lower heats of formation (from the oxides) than

Card 1/2   UDC: 541.123.2:546.776

L 46889-66
ACC NR: AP6027194

molybdates which melt congruently. Orig. art. has: 1 figure and 1 table.

SUB CODE: 07/ SUBM DATE: 07Jul65/ ORIG REF: 002/ OTH REF: 006

Card 2/2 pla

KRUSTANOV, B.; SEMERDZHIEV, M.; MIRCHEV, M.; KUNEV, K.

Experiences with the treatment of closed diaphyseal fractures of bones of the forearm. Khirurgiia, Sofia 11 no.5-6:487-489 1958.

1. Iz Obshchoarmeiskata bolnitsa.
   (FOREARM, fractures,
      surg. (Bul))

KUNEV, K.

Metal intramedullary osteosynthezis in closed diaphyseal fractures of the femur. Khirurgiia, Sofia 13 no.12:1066-1073 '60.

1. Obshtoarmeiska bolnitsa. Nachalnik: B.Angelov
(FEMUR fract & disloc)

KUNEV, K.

Influence of oxygen and superstoichiometric iodine on the
photoconductivity of lead iodide. Godishnik khim 53 no.3:
73-86 '58/'59 [publ. '59].

KOPCHEV, Iv.; STOICHEV, A.; MIRCHEV, M.; CHEPILEV, G.; KUNEV, K.;
ATANASOV, A.; PINKAS, M.; MERDZHANOV, As.

Combined radiation injuries. Khirurgiia 15 no.9/10:847-850
'62.

1. Iz Visshiia voennomeditsinski institut.
                    (RADIATION INJURY)

KIPCHEV, Iv., dotsent; TURTULIKOV, I.; MERCHEV, M.; KUNEV, K.

Our experience with the treatment of gunshot wounds and open fractures. Khirurgiia 17 no.2:158-161 '64.

1. Iz Visshija voennomeditsinski institut.

KUNEV, K.

Contemporary technology of lead production.

p. 26 (TEZHKA PROMISHLENOST) Vol. 6, no. 6, June 1957,
Sofiia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

KONEV, K.

The effect of oxygen and over-stoichiometric iodine on the photoconductivity of lead iodide. K. Klinev, Godishnik Sofiskiva Univ. Fiz.-Mat. Fak. 53, No. 3, 73-86(1958-59) (Pub. 1959)(German summary).—The photocond. of PbI₂ crystals, heated to 370° in different atm., and illuminated after cooling, was studied. Photocond. is largest in samples heated in a mixt. of O_2 and I_2. Inclusion of O_2 and over-stoichiometric quantities of I_2 in the crystals were observed in this case. Heating in I_2 or O_2 alone also increases the photocond., as compared with heating *in vacuo* or with non-heated crystals. A. Aladjen

KUNEV, K.

On the photo- and electroluminiscence of $ZnS.Cu.Nd$-phosphorus.
Godishnik khim 54 no.3:95-112 1959/60 (pub. '61.)

(EEAI 10:9)

(Luminiscence)

S/081/62/000/005/061/112
B156/B108

24,3500

AUTHOR: Kunev, K.

TITLE: A new luminescent substance based on zinc rhodanide

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 410, abstract
            . 5K118 (Dokl. Bolg. AN, v. 13, no. 6, 1960, 689 - 691)

TEXT: Details are given of the luminescence of $Zn(SCN)_2$ activated with

lead. Activation is easily accomplished at 150°C or without heating. The
color of the luminescence is azure (if the concentration of the activator
is not very high), and there is no noticeable afterglow. The reason for
the yellow color of the luminescence of $Zn(SCN)_2$: Pb lies in the forma-
tion of complexes of ions of the activator and the initial substance. In
the blue region of the spectrum, the $Zn(SCN)_2$: Pb luminescence is as
bright as that of ZnS : Cu compositions. [Abstracter's note: Complete
translation.]

Card 1/1

S/058/62/000/005/050/119
A001/A101

AUTHOR: Künev, K.

TITLE: On photo- and electroluminescence of ZnS-Cu, Nd phosphor

PERIODICAL: Referativnyy zhurnal, Fizika, no. 5, 1962, 62, abstract 5V419
               ("Godishnik Sofiysk. un-t. Fiz.-matem. fak.", 1959-1960 (1961),
               v. 54, no. 3, 93-112, Bulgarian; German summary)

TEXT: The author studied the relation between Nd- and Cu-emission of the
phosphor subjected to ultraviolet excitation (365 mμ) or excitation by alternate
electric field as a function of temperature and surrounding gaseous medium. It
was found that linear emission of Nd (multiplet 600 - 610 mμ), dominating in a
specimen heated at 1,120°C for 30 min and being in an H_2S environment, consider-
ably decreases at extended activation of the phosphor in the constant H_2S atmo-
sphere; hereat intensity of Cu-emission grows. The phosphor being in an argon
atmosphere yields no luminescence at all or a very weak one of bluish color in
which Nd lines are absent. With decreasing temperature, Cu-emission grows and
red Nd-photoluminescence decreases. An attempt is made to explain theoretically
the results obtained.
[Abstracter's note: Complete translation]

Card 1/1